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PIPER RUDNICK LLP

1200 NINETEENTH STREET, NW WASHINGTON, DC 20036-2412 TELEPHONE: 202-861-3900

FACSIMILE: 202-223-2085

DOCKET NO.: 2343-133-27

ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

Re:

Serial No.: 10/046,731

Applicant(s): Shiquan TAO, et al. Filing Date: January 17, 2002

For: OPTICAL FIBER SENSOR HAVING A SOL-GEL FIBER CORE AND

A METHOD OF MAKING Group Art Unit: 2874

Examiner:

SIR:

Attached hereto for filing are the following papers:

INFORMATION DISCLOSURE STATEMENT FORM PTO-1449 CITED DOCUMENTS (15)

Our check in the amount of \$\(\begin{align*} \)_-0- is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary extension of time to make the filing of the attached documents timely, please charge or credit the difference to Deposit Account No. 50-1442. Further, if these papers are not considered timely filed, then a request is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

PIPER RUDNICK LI

Steven B. Kelber Attorney of Record

Registration No.: 30,073

Christopher W. Raimund Registration No.: 47,258

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JUL 1 2 2002

Docket No.: 2343-133-27

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

GROUP ART UNIT: 2874

EXAMINER:

IN RE APPLICATION: Shiquan TAO, et al.

SERIAL NUMBER: 10/046,731

FILED: January 17, 2002

FOR: OPTICAL FIBER SENSOR HAVING A SOL-GEL FIBER CORE AND A METHOD OF MAKING

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

Applicant(s) wish(es) to disclose the following information.

REFERENCES

Applicant(s) wish(es) to make of record the documents listed on the attached Form PTO-1449. Copies of the listed documents are attached, where required, as are either statements of relevancy or any readily available full or partial English translations of any non-English-language documents.

RELATED CASES

Attached is a list of Applicant's(s') pending applications and issued patents which may be related to the present application. Copies of the documents, where required, are attached along with Form PTO-1449.

CERTIFICATION

The undersigned certifies that

- each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign or international patent office in a counterpart foreign or international application for the first time (to the knowledge of the undersigned, having made reasonable inquiry) not more than three months prior to the filing of this statement.
- no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign or international patent office in a counterpart foreign or international application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.

BASIS FOR CONSIDERATION

This Information Disclosure Statement is filed:

- without fee and within three months of the filing date of the application.
- without fee and within three months of the date of entry of the U.S. national stage.
- without fee and before the mailing date of a first Office Action on the merits (to the knowledge of the undersigned).
- without fee and with the appropriate certification above.
- without fee and with a new CPA application.
- without fee and with a Request for Continued Examination.
- with fee and before the mailing date of any of a Final Office Action, Notice of Allowance or an action that otherwise closes prosecution (to the knowledge of the undersigned).
- with fee, appropriate certification above, and before payment of the Issue Fee.

DEPOSIT ACCOUNT

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Please charge any additional fees for the papers being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and for which no check is enclosed being filed herewith and fil credit any overpayment to Deposit Account No. 50-1442.

Respectfully submitted,

Steven B. Kelber Attorney of Record

Registration No. 30,073

Christopher W. Raimund Registration No. 47,258

1200 Nineteenth Street, N.W. Washington, DC 20036-2412 Telephone No. (202) 861-3900 Facsimile No. (202) 223-2085



DOCKET NO SERIAL NO. Form PTO 1449 U.S. DEPARTMENT OF COMMERCE 10/046,731 (Modified) PATENT AND TRADEMARK 2343-133-27 APPLICANT Shiquan TAO, et al. GROUP ART UNIT FILING DATE LIST OF REFERENCES CITED BY APPLICANT January 17, 2002 2874 (Use Several Sheets if Necessary) U.S. PATENT DOCUMENTS FILING DATE IF SUB DOCUMENT EXAMINER DATE NAME CLASS NUMBER CLASS APPROPRIATE INITIAL 5,249,251 9/28/93 Egalon, et al. AΑ 5,250,095 10/5/93 Sigel, Jr., et al. AB 2/8/00 6,022,748 Charych, et al. AC FOREIGN PATENT DOCUMENTS TRANSLATION DOCUMENT COUNTRY DATE NUMBER ΑE ΑF OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.) Grattan, et al., "Fiber Optic Sensor Technology: Introduction and Overview", Grattan, et al. (eds.), Optical Fiber Sensor Technology Fundamentals, AG Kluwer Academic Publishers, Dordrecht, 1-44 (2000). MacCraith, et al., "Optical Fiber Chemical Sensor Systems and Devices", Optical Fiber Sensor Technology, Volume 4, Chemical and Environmental AΗ Sensing, Grattan, et al. (eds.), Kluwer Academic Publishers, Dordrecht, 15-112 (1998). "Applications", Chemical and Biochemical Sensing with Optical Fibers and Waveguides, Part IV, Boisdé, et al. (eds.), Artech House Inc, Boston 2857 AΙ 289 and 339-353 (1996). Messica, et al., "Theory of Fiber-Optic, Evanescent-Wave Spectrescopy and! АJ Sensors", Applied Optics, 35, 13, 2274-2284 (1996). Badini, et al., "Sol-Gels with Fiber Optic Chemical Sensor Potential: Effects of Preparation, Aging, and Long-Term Storage", Rev. Sc. Instrum., AΚ 66, 8, 4034-4040 (1995). MacCraith, et al., "Sol-Gel Coatings for Optical Chemical Sensors and ALBiosensors", Sensors and Actuators, B29, 51-57 (1995).

EXAMINER	EXAMINER						DATE CONSIDERED				
*EXAMINER:	Initial if r	reference is	considered,	whether	or 1	not	citation	is	in	conformance	

*EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to Applicant.

SERIAL NO. DOCKET NO. Form PTO 1449 U.S. DEPARTMENT JUN 0 6 2002 OF COMMERCE PATENT AND TRADEMARK 2343-133-27 10/046,731 (Modified) OFFICE APPLICANT Shiquan TAO, et al. GROUP ART UNIT FILING DATE LIST OF REFERENCES CITED BY APPLICANT 2874 January 17, 2002 (Use Several Sheets if Necessary) Flora, et al., "Comparison of Formats for the Development of Fiber-Optic Biosensors Utilizing Sol-Gel Derived Materials Entrapping Fluorescently-Labelled Proteins", Analyst, 124, 1455-1462 (1999). Keeling-Tucker, et al., "Controlling the Material Properties and Biological Activity of Lipase Within Sol-Gel Derived Bioglasses Via Organosilane and Polymer Doping", Chemistry of Materials, 12, 3695-3704 (2000). Yan, et al., "Synthesis, Characterizations, and Optical Properties of Stacked Porous Thin Film Derived from Sol-Gel Process", J. Am. Ceram. Soc., ΑO 79, 4, 1061-1065 (1996). Santos, et al., "Properties of Porous Silica Glasses Prepared Via Sol-Gel AΡ Process", Journal of Non-Crystalline Solids, 273, 145-149 (2000). Tanaka, et al., "Monolithic LC Column: A New Type of Chromatographic Support Could Lead to Higher Separation Efficiencies", Anal. Chem., 73, 420A-429A (2001). Hypszer, et al., "Fiber Optic Technique for Relative Humidity Sensors", ΑR SPIE, 3054, 145-150 (1997). AS ΑU ΑV ΑW AXΑY AZBA BB BCBD BE BF

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DATE CONSIDERED

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